In the Claims

Please amend the claims as follows.

1. (Withdrawn) A pharmaceutical composition for the treatment or amelioration of central nervous system dependent conditions comprising (i) an effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof and (ii) a pharmaceutically acceptable carrier.

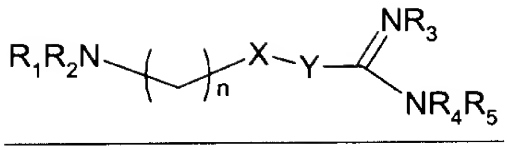
2. (Withdrawn) The pharmaceutical composition according to claim 1 comprising a dose of about 0.1 mg/kg to about 300 mg/kg of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof.

3. (Withdrawn) The pharmaceutical composition according to claim 1 comprising a dose of about 1 mg/kg to about 50 mg/kg of agmatine, or a pharmaceutically acceptable salt thereof.

4. (Withdrawn) The pharmaceutical composition according to claim 2 comprising saline as the pharmaceutical carrier.

5. (Currently amended) A method of treating, ameliorating, or preventing seizures associated with epilepsy~~, seizure, or electroconvulsive disorders~~ in a subject in need thereof, the method comprising:

administering a pharmaceutical composition comprising ~~an effective amount~~ about 0.1 to about 500 mg of agmatine or an agmatine analog , or a pharmaceutically acceptable salt thereof per kilogram of the subject's weight ~~of agmatine, an agmatine analog, or a pharmaceutically acceptable salt thereof~~ to treat, reduce, or prevent ~~the disorder~~seizures associated with epilepsy in the subject, wherein the agmatine analog has the following formula

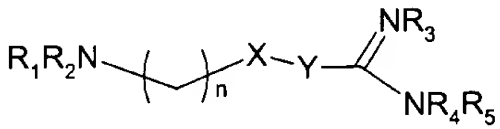


wherein n is 0 to about 10;

R_1, R_2, R_3, R_4, and R_5, are each independently, or any combination thereof: hydrogen, hydroxy, substituted or unsubstituted C_{1-10} alkyl, substituted or unsubstituted C_{3-8} cycloalkyl, substituted or unsubstituted arylalkyl (comprising Ar-$(CH_2)_m$; where Ar is aromatic and m is 0 to about 10) substituted or unsubstituted C_{1-10} alkoxyl, substituted or unsubstituted C_{1-10} acyl, halogeno, amido, phenyl, thio, or amino; and

X and Y are each independently: O, NH, CH_2, CF_2, Se, C=O, C=N, or C=S, or X-Y together is HC=CH, C≡C, N=N, N=CH, CH=N, or a saturated or unsaturated ring.

6. (Canceled herein). A method according to claim 5, wherein the agmatine or agmatine analog has the following formula



wherein n is 0 to about 10;

R_1, R_2, R_3, R_4, and R_5, are each independently, or any combination thereof: hydrogen, hydroxy, substituted or unsubstituted C_{1-10} alkyl, substituted or unsubstituted C_{3-8} cycloalkyl, substituted or unsubstituted arylalkyl (comprising Ar-$(CH_2)_m$; where Ar is aromatic and m is 0 to about 10) substituted or unsubstituted C_{1-10} alkoxyl, substituted or unsubstituted C_{1-10} acyl, halogeno, amido, phenyl, thio, amino; and

X and Y are each independently: O, NH, CH_2, CF_2, Se, C=O, C=N, C=S, or S; or X-Y together is HC=CH, C≡C, N=N, N=CH, CH=N, or a saturated or unsaturated ring.

7. (Original) A method according to claim 5, wherein the pharmaceutical composition comprises agmatine or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier.

8. (Canceled herein) A method according to claim 5, wherein the composition is administered to a human subject in a dose of about 0.1 to about 500 mg of the agmatine or agmatine analog per kilogram of the human subject's weight.

9. (Currently amended) A method according to claim 8, wherein the composition is administered in a dose of about 0.1 to about 50 mg/kg per day indefinitely or until ~~symptoms~~seizures ~~associate~~associated with the ~~condition or disorder cease~~epilepsy.

10. (Canceled herein). A method of treating the occurrence of epilepsy, seizure or electroconvulsive disorders in a human comprising the step of administering ~~an effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof~~ about 0.1 to about 500 mg of agmatine or an agmatine analog , or a pharmaceutically acceptable salt thereof per kilogram of the subject's weight to a human in need thereof and preventing or reducing the disorder.

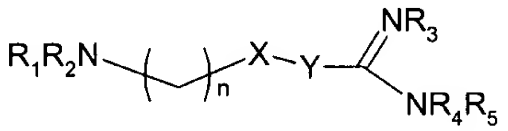
11. (Currently amended) A method according to claim ~~10~~5, comprising preventing or reducing seizure activity ~~as the disorder~~.

12. Canceled herein) A method according to claim ~~10~~5, comprising preventing or reducing epileptic activity as the disorder.

13. (Currently amended) A method of treating or preventing seizures associated with epilepsy ~~seizure or electroconvulsive disorders~~ in a human comprising:

identifying a human subject in need of said treatment or prevention; and

administering ~~an effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof~~ about 0.1 to about 500 mg of agmatine or an agmatine analog , or a pharmaceutically acceptable salt thereof per kilogram of the subject's weight to the human subject, wherein the agmatine analog has the following formula



wherein n is 0 to about 10;

R_1, R_2, R_3, R_4, and R_5, are each independently, or any combination thereof: hydrogen, hydroxy, substituted or unsubstituted C_{1-10} alkyl, substituted or unsubstituted C_{3-8} cycloalkyl, substituted or unsubstituted arylalkyl (comprising Ar-$(CH_2)_m$; where Ar is aromatic and m is 0 to about 10) substituted or unsubstituted C_{1-10} alkoxyl, substituted or unsubstituted C_{1-10} acyl, halogeno, amido, phenyl, thio, or amino; and

X and Y are each independently: O, NH, CH_2, CF_2, Se, C=O, C=N, or C=S, or X-Y together is HC=CH, C≡C, N=N, N=CH, CH=N, or a saturated or unsaturated ring.

14. (Original) A method according to claim 13, comprising identifying a human subject in need of said treatment by analyzing an electroencephalogram taken of the human subject.

15. (Currently amended) A method according to claim 13, comprising identifying a human subject in need of said treatment by observing ~~one or more features associated with~~ the occurrence of a seizure in said subject.

16. (Currently amended). A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof

to the human subject indefinitely or until the ~~symptoms or features associate with the disorder~~seizures associated with epilepsy cease.

17. (Currently amended) A method according to claim 13, comprising preventing or reducing seizures associated with epileptic activity ~~as the disorder~~.

18. (Original) A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof as a pharmaceutical composition.

19. (Original) A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof parenterally.

20. (Original). A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof orally.